















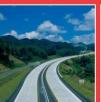




Project Delivery Process

February 23, 2012 Chief Engineer, Jon Nance



















Transportation Program Life Cycle

Long-Range Planning

Determine Needs

Program Development

Project Planning

Minimize Impacts

Project Design

Design and Acquire ROW

Construction

Build Facility

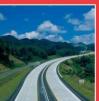
Maintenance & Operations

Maintain Facility























Typical Project Durations (from planning to advertisement)

- Major new location projects (ten to twelve years)
- Widening projects (seven to eight years)
- Bridge projects (one to four years)





















Typical Project Construction Durations

- New Location − 3 ½ 4 Years
- Major Pavement Rehabilitation 2 ½ 3 Years
- Urban Widening 2 3 Years
- Bridge Replacement (low impact) 6–18 months



















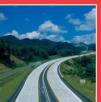


NCDOT Contracting Methods-"Tools in the Toolbox"

- Design Bid Build
- Design Build
- Public Private Partnership (3P)
- Design Build Finance
- Express Design Build
- Design Build Own Operate
- Performance Based Maintenance Contract



















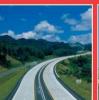


Design-Bid-Build

- Utilized for the majority of our projects
- Methods used in this process
 - A + B Bidding
 - Incentives
 - Floating Start Dates



















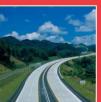


A+B Bidding

- Method that considers completion date in award
- Bidders are required to bid the number of days they propose to complete the project
- Each day is assigned a cost
- The bidder with the lowest combination of construction cost and time is awarded the project



















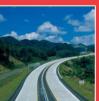


Incentives

- Used on selected projects in which completion is critical to the public
- Incentive Methods
 - Daily in which contractors are paid a specified amount for each day that the project is finished earlier than the date specified
 - Lump sum in which a contactor is paid a lump sum amount for finishing before the specified completion date



















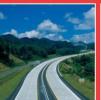


Floating Start Dates

- Method that allows bidders to determine the date they begin construction
- Contractor then have a specified number of days to complete the project
- Allows bidders flexibility to schedule their work to provide the best bids





















Design-Build

- Method in which final design and construction are combined in one contract
- Good method for the right projects
 - Projects in which there is potential for innovation
 - New location
 - Interstate widening
 - Large Bridges





















Project Complexity























Project Innovation





















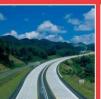


Project Innovation























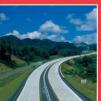
Future Opportunities

Construction Manager/ General Contractor CM/GC

Method in which general contractor is retained while design is being done





















Questions?

